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## COÖPERATION OF FEDERAL BUREAUS WITH PRIVATE AGENCIES IN STATISTICAL WORK.\*

BY JOHN CUMMINGS, PH.D., *Expert Special Agent of the Bureau of the Census.*

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Members of the associations may be interested in an instance of coöperative statistical work in which the coöperating agencies included two federal bureaus, two private associations or foundations, and a local public agency—these being the coöperating agencies in a recently completed survey of industries and schools in the city of Richmond, Virginia. The report of this survey will shortly issue as an official publication of the federal government. Specifically, the coöperating agencies in this work were the following:

1. The National Society for the Promotion of Industrial Education, which was active in organizing the survey and assumed certain expenses for printing bulletins bearing upon the work and for services of its office force. This society has just recently, some three weeks since (Dec. 9–12, 1914), held its annual convention in Richmond, practically the entire time of the convention being devoted to a consideration of the results of the survey and to the formulation of recommendations based upon the findings.

It may be noted as an indication of the value of such work that the superintendent of the Richmond schools stated to the convention that the survey had outlined a program of procedure in industrial education providing for the development in Richmond during the next ten years. Incidentally he stated that the survey had already saved the city \$250,000.

2. The city of Richmond itself, represented by the Superintendent of Schools and by a local committee of citizens. Richmond provided funds to cover the cost of making a survey of its industries.

3. The Russell Sage Foundation of New York City, which through its Educational Director made the school survey and assumed a large portion of the cost of the school survey.

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4. The United States Bureau of Education, represented by its expert in industrial education, who assisted in the establishment of prevocational and vocational courses, organized upon the basis of the survey findings and recommendations.

5. The United States Bureau of Labor Statistics. This bureau's expert on industrial education was given six months' leave of absence, to enable him to serve as Director of the Industrial Survey. The Bureau of Labor Statistics, also, is to issue the full report of the findings and recommendations, which will probably run to 300 pages or more and will include the four large text-charts, a few copies of which, by the courtesy of the Bureau, I have been permitted to bring to this meeting for distribution in case any members present care to have them. The Bureau, by assuming the cost of printing these charts and the full report, has made possible the publication of both the charts and the report in the proposed form. The chief editor of the Bureau, Mr. Verrill, has served upon the editorial committee of the survey and through him and Commissioner Meeker the Bureau has coöperated to the full extent of its authority to do so.

Another department of the federal government may be mentioned as being implicated indirectly in the undertaking—the Department of Commerce—since Secretary Redfield of that Department is President of the National Society for the Promotion of Industrial Education. The Commissioner of Labor Statistics and the Secretary of Commerce manifested their interest in the work by attending the convention held in Richmond to consider the findings of the survey and by participating in the proceedings.

It may be of interest to note, also, since there has been some misunderstanding as regards the attitude of organized labor with reference to the institution of industrial education even in the public schools, that in the work of gathering the data the agents of the survey had the full coöperation of the local labor unions, and that Mr. Gompers, President of the American Federation of Labor, also attended the convention in Richmond and in an address heartily endorsed the proposed program.

The character of the data gathered relating to occupations may be inferred from the charts, which present in parallel

columns a statistical analysis of some 56 occupations in the printing, building, and metal trades, and in the tobacco industry. Occupations in retail stores are included in the report, but have not been charted. The report contains, also, the full analysis of each occupation briefly summarized on the charts, together with a very considerable amount of tabular matter and general text dealing with the industrial character of Richmond.

The data for the charts and for the tabulations were gathered upon schedules and through personal interviews with employers and employees.

The schedule inquiries related to such topics as hours, wages, seasonal fluctuation, age of entrance to trade, extent to which the trade could be learned in the shop, years required to learn the trade, age period of maximum productivity, source of labor supply, the demand for labor and whether the demand is increasing or decreasing in Richmond; the conditions of employment that involve physical or nervous strain, that stimulate or that narrow or restrict development, or are in other respects important as affecting the welfare of the worker; the requirements as regards general, trade, and technical education of the worker; the line of promotion in the shop; provision made in the shop for systematic instruction of apprentices and of journeymen; the common deficiencies of workers; what training the school ought to give the boy or girl before he enters the shop; what it ought to give for the apprentice and for the journeyman in the shop, by means of continuation classes; and other facts of importance in constituting a statistical basis for organizing industrial education.

The charts summarize briefly a portion of the data gathered on these schedules and from other sources. In the case of each occupation shown, the analysis begins with a brief description of the nature of the occupation itself and continues down the column covering the points which have been specified.

Consistently with the purpose of the industrial survey—*i. e.*, to provide a basis of statistical information relating to industrial occupations in the city of Richmond upon which to base a system of industrial education in the public schools—and

while the work was still in progress, courses were organized, in response to requests coming from the workers themselves, for molders, plumbers, electricians and for workers in other occupations.

It is assumed as a principle justifying such surveys that industrial education must be intimately related to specific local industrial needs—that it must be based upon data relating not to occupations in general, but to occupations as determined by the industrial developments of the community in which that sort of education is undertaken—taking account, for example, of the extent to which processes and employments in the given community have been specialized. In the survey of Richmond's building trades, for example, some fifteen distinct occupations could be defined, but if the survey had been in New York city, the number of distinct occupations in the building trades would have been very much greater. In Richmond the carpenter may have occasion infrequently to lay a parquet floor, in New York, the parquet-floor layer may not be required even occasionally to do any other sort of work. In general the needs of Richmond, as regards industrial education, are local and peculiar, and the industrial courses established in Richmond should, therefore, be unique, reflecting the industrial character of the community and being modified and developed as the local industries change. In accordance with this principle, the data upon which to base industrial education in any community must be gathered in the workshops of that community. This makes the basis of industrial education empirical and statistical. It makes the problem of industrial education essentially a local, municipal problem. It assumes that no system of industrial education devised for one community is adapted to the needs of any other community.

If the problem of industrial education is so essentially local in character, what interest has the federal government in the character of Richmond's industrial education? The answer is of course obvious. No social problem is purely local, and while industrial education must, if it is to be efficient, be differentiated locally, it is, nevertheless, in the aggregate a national affair. The federal government, representing the

country as a whole in its industrial development and competition with foreign nations, is interested in the extension of practically efficient industrial education as a national asset, just as Richmond, in its industrial development in competition with other cities, is interested in the development of practically efficient industrial education as a municipal asset.

Formal coöperation, such as has been outlined, between public and private agencies in the actual field work of statistical inquiry, may seem somewhat inconsistent, not only with official dignity, but with the general principle that public agencies must not engage in private enterprises. This appearance of inconsistency arises from a failure to recognize that private associations may be engaged in work which is clearly affected with a public interest. Where this is the case coöperative participation of federal bureaus in rendering statistical service is entirely proper as a public function. The extent to which government bureaus can coöperate with private agencies in statistical work is obviously limited to such enterprises as are clearly affected with a public interest, and in general the possibility of coöperation is determined by the character of the private agencies.

The number of responsible, permanent private foundations and associations which represent important social interests is very considerable and is increasing. These private organizations have arisen in response to recognized social needs. Immigrants stranded in our large cities, for example, constitute a social problem, and a League for the Protection of Immigrants is organized. The need for industrial education becomes pressing and a society for the Promotion of Industrial Education is organized. Conservation of soil, water-power, and forests is the basis of private associations. In a word, every important social need is bound, sooner or later, to become the basis of organization. Such organizations are national in character, they represent national interests, and where the purposes of these organizations are consistent with the public interest, coöperative participation by bureaus of the federal government in the work which they are doing, would seem to be a natural procedure.

Incidentally it may be noted that the difficulties in the way

of such coöperation are in some respects less considerable than in the case of public agencies. Public agencies, state or municipal, are essentially local—essentially not national in character. Every public agency has its geographic field of operation defined in ordinances and statutes. Such agencies, moreover, operate under a rigid legal definition of powers and functions, which in many instances constitutes a barrier to effective coöperation.

In the case of private agencies there is no rigidity of legal status to be broken down. It may be noted, further, as a justification for coöperation with private agencies, that they, more frequently than public agencies, represent specific social problems, national in scope—that they represent live interests which have developed in the community—that they represent what the community is thinking about; whereas the public agency or bureau represents a traditional interest as defined in more or less permanent statutes and ordinances. The private agency may infuse inspiration and motive into official routine.

The advantages of coöperation in the instance which has been noted will be obvious, and it will, I think, be clear that equally great advantages may result from similar coöperation in other lines of work where permanent, responsible, private agencies are in the field.

All of the work on the Richmond survey was done under the direction of professional experts, who prepared the schedules, and supervised the field work and the tabulation of the data. Such work, if it is to be of value, must be done by professionals, and it will be obvious that cities generally cannot maintain corps of experts for this work, since in the nature of the case the work is not, as regards any single city, continuous.

This is the condition which perhaps more than any other makes coöperation of the federal government essential. A municipality undertaking such work independently may find it necessary to depend upon inexperienced service. Without coöperation, each survey is experimental and the data gathered relating to occupations and industries in different cities are bound to be of varying value and character.

As regards the country as a whole, however, assuming that cities generally undertake such surveys, the work is continuous, and bureaus of the federal government can, therefore, organize on a permanent basis for the promotion of such undertakings.

While the statistical analysis of occupations undertaken in Richmond was undertaken for the specific purpose of providing a basis of industrial education in that city, the data gathered are of general economic significance, being such as must to a greater or less extent underlie economic speculation regarding industrial conditions and employments. The significance of the data will, obviously, increase in proportion as the number of cities covered increases, and in proportion as the work is organized and conducted in accordance with some uniform scheme. Coöperation of the federal bureaus would seem to be an obvious way of securing this uniformity in method and data.

Finally, it is of importance that the schedules used in such work shall be subjected to scientific criticism and that they shall be perfected so as to get the data which are of economic value. The Richmond survey is the first of its kind and is necessarily in this respect experimental. It is intended to serve as a type survey, but even while the work was in progress those engaged in the work realized that improvements could be made in the methods and in the schedules, and when the report issues from the Bureau of Labor Statistics, it is to be hoped that criticisms will be freely forthcoming from those interested to secure accurate data regarding the common industrial pursuits of wage-earners.